29. (New) The system of claim 10 wherein the local exchange carrier comprises an incumbent local exchange carrier.

30. (New) The method of claim 17 wherein the local exchange carrier comprises an incumbent local exchange carrier.

31. (New) The method of claim 22 wherein the local exchange carrier comprises an incumbent local exchange carrier.

REMARKS

By this amendment, claims 1-31 are pending, in which claims 1, 10, 17, and 22 are amended, and in which claims 28-31 are added. Care was exercised to avoid the introduction of new matter, with adequate descriptive support being found throughout the specification (e.g., FIG. 1, elements 38, and 46, and Specification, p. 7:22 to p. 8:2).

The Office Action mailed March 19, 2002 rejected claims 1-4, 10, 20-22, 25, and 26 as obvious under 35 U.S.C. § 103 based on *Brouckman et al.* (US 6,134,307); claims 5 and 27 as obvious over *Brouckman et al.* in view of *Witzman et al.* (US 5,737,399); claims 6 and 7 as obvious over *Brouckman et al.* in view of *Doherty et al.* (US 5,333,184); claims 8 and 9 as obvious over *Brouckman et al.* in view of *Kay et al.* (US 5,575,894); claims 11-16 as obvious over *Brouckman et al.* in view of *Herbert* (US 5,333,183); claims 17-19, and 23 as obvious over *Brouckman et al.* in view of *Liu et al.* (US 5,898,780) and *Wang* (US 5,991,746); and claim 24 as obvious over *Brouckman et al.* in view of *Jaiswal et al.* (US 6,002,754).

The rejection of claims 1-27 is respectfully traversed because the *Applied References*, singly or in combination, fail to teach the features of the claims, as amended. For example, independent claims 1, 10, 17, and 22, as amended, recite a computing device, gateway, or signaling gateway for "interfacing the signaling network with an Internet Service Provider and a

local exchange carrier," as well as "transmitting the call billing data in the second data structure format to a data network for billing processing by a co-carrier access billing system for settlement with the Internet Service Provider and the local exchange carrier."

By contrast, none of the *Applied References* teach or otherwise suggest this feature. Specifically, *Brouckman et al.*, the primary reference, is generally directed to converting call events received from a satellite-based communications system 100 for distribution to different entities around the world to ensure that correct information is routed to the correct entity, so that proper billing can be performed (*Brouckman et al.,* Abstract, and FIG. 1). *Brouckman et al.*, however, fails to teach or suggest "interfacing the signaling network with an Internet Service Provider and a local exchange carrier," as well as "transmitting the call billing data in the second data structure format to a data network for billing processing by a co-carrier access billing system for settlement with the Internet Service Provider and the local exchange carrier," as set forth in independent claims 1, 10, 17, and 22. In fact, *Brouckman et al.* does not even disclose a local exchange carrier and it would be unclear how to incorporate a local exchange carrier into the satellite-based communications system 100 of *Brouckman et al.* in the manner claimed.

The remaining *Applied References, Witzman et al., Doherty et al., Kay et al., Herbert, Liu et al., Wang, Jaiswal et al.*, fail to cure the noted deficiencies in *Brouckman et al.* Specifically, *Witzman et al.* directed to centralized storage and verification elements (SAVE) to provide raw data that is filtered of extraneous data so as to be useful to downstream clients, fails to teach or suggest the noted features recited in independent claims 1, 10, 17, and 22.

Similarly, *Doherty et al.* directed to call message recording for telephone systems, *Kay et al.* directed to a virtual foreign exchange service, *Herbert* directed to an MDR data record collection and reporting system, *Liu et al.* directed to a method and system for authorizing remote Internet access, *Wang* directed to a billing system using a modified file transfer protocol,
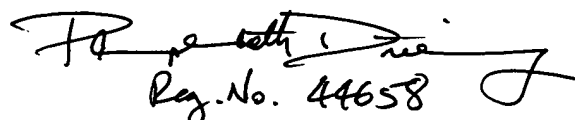
and *Jaiswal et al.* directed to billing formatter for telephone systems, also fail to teach or suggest the noted features.

New dependent claims 28-31 have been added and recite that the local exchange carrier comprises an incumbent local exchange carrier. Dependent claims 2-9, 11-16, 18-21, and 23-31 are allowable for at least the same reasons as their corresponding independent claims and are individually patentable on their own merits. For example, there is no motivation, but impermissible hindsight, to cobble together seven diverse references, picking and choosing arbitrary elements to meet the recited claims.

Therefore, the present response overcomes the rejections of record, placing the present application in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at 703-425-8501 so that such issues may be resolved as expeditiously as possible.

                                        Respectfully Submitted,

                                        DITTHAVONG & CARLSON, P.C.

_6/19/02_
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APPENDIX

Please amend claims 1, 10, 17, and 22, as follows:

--1. (Thrice Amended) An apparatus for managing call billing records for users of a signaling network operative to carry user calls, comprising:

a gateway interfacing the signaling network with an Internet Service Provider <u>and a local exchange carrier</u> and operative to collect call billing data from the signaling network in a first data structure format; and

a network processor operative to:

receive the collected call billing data in the first data structure format from the gateway,

convert the collected call billing data from the first data structure format to a second data structure format, and

transmit the call billing data in the second data structure format to a data network for billing processing <u>by a co-carrier access billing system for settlement with the Internet Service Provider and the local exchange carrier.</u>

10. (Thrice Amended) A system for managing call billing records for users of a signaling network, comprising:

a signaling network having communications capabilities to carry user calls;

a signaling gateway interfacing the signaling network with an Internet Service Provider <u>and a local exchange carrier</u> and operative to collect call billing data resulting from the calls in a first data structure format;

a communication link coupled to the signaling gateway; and

a network processor communicating with the signaling gateway via the communication link and with a data network and operative to:

convert the collected call billing data from the first data structure format to a second data

structure format conducive to conducting billing processing and

transmit the call billing data in the second data structure format to the data network for

billing processing <u>by a co-carrier access billing system for settlement with the Internet Service</u>

<u>Provider and the local exchange carrier.</u>

17. (Thrice Amended) A method of managing call billing records of users of a signaling

network operative to carry user calls, comprising:

collecting call billing data with the first computer device in a first data structure format at

a first computer device, said first computer device interfacing the signaling network [and] <u>with</u>

an Internet Service Provider <u>and a local exchange carrier</u>;

transferring the call billing data from the first computer device to a second computer

device;

converting the call billing data at the second computer device from the first data structure

format to a second data structure format; and

transmitting the call billing data in the second data structure format to a data network for

billing processing <u>by a co-carrier access billing system for settlement with the Internet Service</u>

<u>Provider and the local exchange carrier.</u>

22. (Thrice Amended) A method of managing call billing records generated from usage

within a signaling network by users, comprising:

collecting call billing data with a signaling gateway in a first data structure format, said

signaling gateway interfacing the signaling network [and] <u>with</u> an Internet Service Provider <u>and</u>

<u>a local exchange carrier</u>;

transferring the call billing data from the signaling gateway to a network processor;

converting the call billing data with the network processor from the first data structure

format to a second data structure format conducive to processing billing information; and

transmitting the call billing data in the second data structure format to a data network for

billing processing <u>by a co-carrier access billing system for settlement with the Internet Service</u>

<u>Provider and the local exchange carrier</u>.--.